

REPLACED BY
ART 34 AMDT

CLAIMS

1. A method of producing nano-composite powder consisting essentially of hydroxyapatite(HA) and zirconium oxide (ZrO_2) comprising the steps of:
reacting orthophosphoric acid with calcium hydroxide to form a HA suspension;
adding zirconium suspension to the HA suspension to form a composite feedstock;
subjecting the composite feedstock to Radio Frequency (RF) Plasma Spraying to form the nano-composite powder.
2. The method according to claim 1, wherein the quantity of zirconium oxide suspension added is in the range of 10 to 40 weight %.
3. A nano-composite powder comprising:
60-90wt% calcium hydroxyapatite;
10-40wt% zirconium oxide; and
traces of calcium phosphate.